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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: CERIUM-MODIFIED DOPED STRONTIUM TITANATE COMPOSITION FOR SOLID OXIDE FUEL CELL AN-
ODES AND ELECTRODES FOR OTHER ELECTROCHEMICAL DEVICES

(57) Abstract: The present invention provides novel compositions that find advantageous use in making electrodes for electrochem-
ical cells and electrochemical devices such as solid oxide fuel cells, electrolyzers, sensors, pumps and the like, the compositions
comprising cerium-modified doped strontium titanate. The invention also provides novel methods for making and using anode ma-
terial compositions and solid oxide fuel cells and solid oxide fuel cell assemblies having anodes comprising the compositions.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01M8/12 H01M4/90 H01M4/88

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZHANG ET AL: "Doped Strontium titanate current liquid and preparation method" STN CAPLUS, XX, XX, vol. 128, no. 20, 1997, XP002146552 abstract	1-104
X	& CN 1 139 813 A (PHYSICS INST., CHINESE ACADEMY OF SCIENCES, PEOP. REP. CHINA) 8 January 1997 (1997-01-08) abstract	1-104
X	US 5 021 304 A (RUKA ROSWELL J ET AL) 4 June 1991 (1991-06-04) * see col. 4, l. 44 - 59, claims 1-7 * the whole document	1-104
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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 Internatⁿ lⁿ plication No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>SUNSTROM IV J E ET AL: "SYNTHESIS, STRUCTURE, AND PROPERTIES OF LA1-XSRXTIO3 (0 < X < 1)"</p> <p>CHEMISTRY OF MATERIALS, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US,</p> <p>vol. 4, no. 2, 1 April 1992 (1992-04-01), pages 346-353, XP000265523</p> <p>ISSN: 0897-4756</p> <p>* see p.348, table III, p.350, Fig.3 *</p> <p>the whole document</p>	1-104
Y	<p>WO 00 64814 A (HUI SHIQUIANG ;UNIV MCMASTER (CA); PETRIC ANTHONY (CA))</p> <p>2 November 2000 (2000-11-02)</p> <p>* see p.7, l. 14 - 28, p.9, l. 5- 13, claims *</p> <p>the whole document</p>	1-104
Y	<p>JP 05 235383 A (KANEKAFUCHI CHEM IND CO LTD) 10 September 1993 (1993-09-10)</p> <p>abstract</p>	1-104
Y	<p>SLATER P R ET AL: "SYNTHESIS AND ELECTRICAL CHARACTERISATION OF DOPED PEROVSKITE TITANATES AS POTENTIAL ANODE MATERIALS FOR SOLID OXIDE FUEL CELLS"</p> <p>JOURNAL OF MATERIALS CHEMISTRY, THE ROYAL SOCIETY OF CHEMISTRY, CAMBRIDGE, GB,</p> <p>vol. 7, no. 12,</p> <p>1 December 1997 (1997-12-01), pages 2495-2498, XP000736616</p> <p>ISSN: 0959-9428</p> <p>* see p.2498, par. bridging left/right col.; same page, right col., l.4- end *</p> <p>the whole document</p>	1-104
Y	<p>PUDMICH G ET AL: "CHARACTERIZATION OF NEW CERAMIC ANODE MATERIALS FOR DIRECT METHANE OXIDATION IN SOFC"</p> <p>ELECTROCHEMICAL SOCIETY PROCEEDINGS, ELECTROCHEMICAL SOCIETY, PENNINGTON, NJ, US,</p> <p>vol. 99, no. 19, 1999, pages 577-582, XP000938065</p> <p>ISSN: 0161-6374</p> <p>* see p.579, last par., p. 582, conclusions *</p> <p>the whole document</p>	1-104

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>PUDMICH G ET AL: "Chromite/titanate based perovskites for application as anodes in solid oxide fuel cells" SOLID STATE IONICS, NORTH HOLLAND PUB. COMPANY. AMSTERDAM, NL, vol. 135, no. 1-4, 1 November 2000 (2000-11-01), pages 433-438, XP004221580 ISSN: 0167-2738 * see p.433, abstract, p.434, left col.,, 2. experimental, p.435, table 1, p.437, conclusion * the whole document</p>	1-104
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